

SAUGET, ILLINOIS

ROUTE 3 MANHOLE REPAIRS

TECHNICAL STAFF CONFERENCE

Present: Monsanto Co. Dick Nelson
Cerro Copper Products Jim Johnson, Roy Brown
Village Association Jim Dalton
Keeley Bros. Contr. Arnold Czechowicz
P. H. Weis & Assoc. Paul Weis

Date: June 26, 1981

This meeting was a follow up meeting to discuss additional information in regard to storm water flow calculations to be developed by P. H. Weis & Associates as routed through the existing 24" and 30" sewer lines that are affected by the Route 3 manhole repair project. The hydraulic study was to determine the effect of blocking off one of the two lines during the course of construction with consideration being given to excess storm water being stored in Dead Creek which was under consideration as a temporary retention basin.

In addition to the above, data was to be developed as to determine a method of monitoring the structure just north of Dead Creek in order to notify various interested parties by an alarm device at such time that the water level in that structure and subsequently in Dead Creek would be at a pre-determined elevation so as to not affect normal functions and operations of Cerro Copper. The results of the hydraulic study were presented by P. H. Weis and Associates wherein it was set forth that 4 basic drainage areas were established that flow through two existing sewer lines and for the purposes of the study, a 20 year storm was considered. The calculations as presented showed that the total run-off that would eventually be routed through the sewers was approximately 350 cfs which translates to 155,700 gpm. It was further presented that with the water level surcharged to the point of the overflow into Dead Creek namely to elevation 399.15, the capacity of both pipes combined would be approximately 15,700 gpm or approximately 1/10 the flow that could be produced by a 20 year storm.

It was also presented by P. H. Weis & Associates that a level circuit was performed by that firm as requested at the previous meeting in order to determine the elevation of certain critical points set by Cerro Copper. Several elevations were established by survey, however, the following were presented at the meeting:

Influent elevation into manhole from Dead Creek - 399.15
Flow line of a vertical grate inlet at Dead Creek - 397.82
Water elevation of Dead Creek on 2/18/81 (from previous survey) - 399.35
Trench drain flow line in low dock at Cerro Copper - 404.94
Flow line of lift station overflow check valve at Dead Creek - 398.01

CER 099661

CONFIDENTIAL 92-CV-204-WDS

In addition to the above, a sketch and cost information was presented by Dick Nelson as developed by Monsanto Communication Technical Staff. The estimated cost for installation was \$8,500.00 with an estimated telephone line charge of \$50.00 per month.

General discussions of the data submitted took place wherein Mr. Paul Weis stated that considering the hydraulic data developed, it would be rather insignificant during a 20 year storm whether either of the two lines in question were temporarily closed off as it was apparent that with both lines flowing, a back up into Dead Creek would be eminent in any case.

It was further stated that in his opinion any expenditure for a monitoring system would be somewhat meaningless. This statement brought objection from Mr. Johnson of Cerro Copper in that no matter how insignificant the additional line being in operation would be, it would still cause additional flooding and cause that additional flooding to remain in Dead Creek and consequently in Cerro's plant for a longer period of time.

Next, a discussion of the critical elevations for flooding in the Cerro Plant were discussed, however, no conclusion as to what elevation within the plant would be critical as far as Cerro Copper was concerned. Since no conclusions were reached on any of the matters discussed, it was stated by Paul Weis that the information as developed and consequences would be presented to the Village of Sauget with a recommendation as to the method of procedure so that a decision could be made and the project would proceed.

Respectfully submitted,
P. H. WEIS & ASSOCIATES, INC.

Paul H. Weis

Paul H. Weis, P.E.

PHW:law

cc:Paul Sauget
cc:Steve Smith
cc:All present